

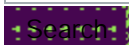
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Thinking Big

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How can small states hold their own in an increasingly globalized economy?

The term "small state" generally refers to sovereign countries with fewer than one and a half million people (see box). By this criterion, 45 developing countries (41 of the IMF's 184 member countries) are small states. They range from "micro" states, such as Palau and St. Kitts and Nevis, each with fewer than 40,000 people, to Botswana, Gabon, The Gambia, Guinea-Bissau, Mauritius, and Trinidad and Tobago, with more than one million people each (see Table 1).

Are small states different?

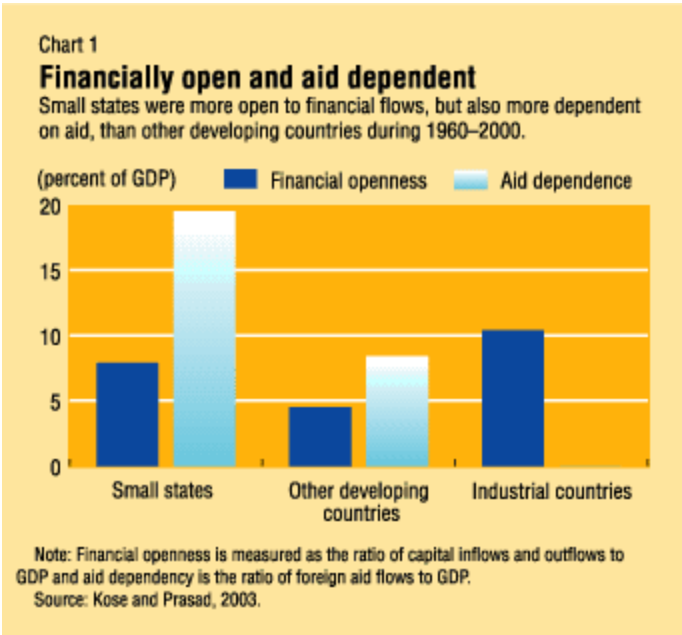
Per capita income varies. Small states range from low-income economies, such as Comoros, The Gambia, Guinea-Bissau, and São Tomé and Príncipe (with per capita GNPs of less than \$700), to high-income economies, such as The Bahamas, Brunei, Malta, and Qatar (with per capita GNPs of about \$10,000 or more) (Table 2). Their per capita incomes are, on average, higher than those of other developing economies. Other indicators of economic well-being, including poverty rates, life expectancy, and literacy, are similar for small states and other developing economies.

Trade is more open. Small states are generally more open to trade than other developing countries, and their average openness ratio (exports plus imports divided by GDP) has risen significantly over time. They

also tend to have a less diversified production structure and export base, with one or two dominant products or industries. For example, garments represent more than 80 percent of Lesotho's total merchandise exports. In Antigua and Barbuda, Barbados, Samoa, St. Kitts and Nevis, and St. Lucia, tourism earnings constituted more than half of exports of goods and services in the late 1990s.

Larger public sectors. The size of government, as measured by the ratio of government expenditures to GDP, is greater in small states than in other developing countries. Economies that are more open to external trade and, consequently, more vulnerable to external shocks, tend to have larger public sectors, which help counteract the short-term effects of such shocks. But small states have higher ratios of government expenditures to GDP even after controlling for per capita income and degree of openness, perhaps reflecting the higher average costs of producing public goods on a small scale.

Strong trade links, but weaker financial links. Over the past four decades, average output growth has been higher in small states than in other economies, the apparent result of their strong trade links and their substantially higher investment ratios. Clearly, small states have benefited significantly from trade openness. Their financial links with the global economy are, however, weaker. Although the average ratio of the volume of capital flows to GDP is larger for small states than for other developing countries, it is still smaller than for industrial economies. In several small states where foreign aid remains a major source of income, aid dependency continues to be an important problem (Chart 1). The average ratio of foreign aid to GDP is about 20 percent in small countries, whereas it is less than 9 percent in other developing economies.



Exchange rates tend to be fixed. It would seem appropriate for small states, given their vulnerability to external shocks, to use freely floating exchange rates as a buffer. But this is generally not a feasible option, and most small states have fixed exchange rates of one form or another. One reason is that it is difficult to have a competitive and well-functioning foreign exchange market with only one or two major banks and little or no scope for open market operations. In addition, many of these economies are closely tied to larger economies that constitute a significant source of their export earnings. In such circumstances, the benefits of eliminating nominal exchange rate volatility by using a de facto fixed exchange rate can exceed the gains of having an independent monetary policy and having the exchange rate serve as a shock absorber.

Table 1
Small states in the IMF membership
The geographical spread of small states that are IMF members

Africa	East Asia and the Pacific	Latin America and the Caribbean	Other regions

Botswana	Brunei	Antigua and Barbuda	Bahrain
Cape Verde	Fiji	Bahamas, The	Bhutan
Comoros	Kiribati	Barbados	Cyprus
Djibouti	Marshall Islands	Belize	Estonia
Equatorial Guinea	Micronesia, Federated States of	Dominica	Maldives
Gabon	Palau	Grenada	Malta
Gambia, The	Samoa	Guyana	Qatar
Guinea-Bissau	Soloman Islands	St. Kitts and Nevis	
Mauritius	Tonga	St. Lucia	
São Tomé and Príncipe	Vanuatu	St. Vincent and the Grenadines	
Seychelles		Suriname	
Swaziland		Trinidad and Tobago	

Source: IMF.

Notes: Only small states that are developing economies are analyzed in this article. Small states that are not IMF members include Cook Islands, Nauru, Niue, and Tuvalu.

Table 2
How do they compare with other countries?
 Despite their size, small states have higher average growth rates than other countries.
 (1960-2000)

	Relative income per capita (U.S. = 100)	Trade openness (percent of GDP)	Government expenditure (percent of GDP)	Investment (percent of GDP)	Output growth (percent)
Small states	24.9	111.5	20.5	28.0	5.9
Other developing countries	16.3	60.5	13.8	19.9	3.8
Industrial countries	75.4	63.3	17.8	23.9	3.4

Source: Kose and Prasad, 2003.

With a total of only about 20 million people, small states account for a small fraction of the world's population and output, but their number is significant enough to make them an important group. What do the inexorable forces of globalization portend for the viability and prosperity of small states? How can they protect themselves from being buffeted by these forces? The IMF has increased its research activities related to small states with a view to developing policies better suited to their special needs.

Is bigger better?

Small states face many disadvantages, including

- ⌘ **Geography.** Many are located far from the major trade centers, significantly increasing the costs of their exports and imports. Others are highly susceptible to natural disasters, such as earthquakes and hurricanes, that can affect the entire country and therefore have a devastating effect on the economy.
- ⌘ **Vulnerability.** Their openness to trade, highly specialized production and export structures, and heavy reliance on export earnings make small states particularly vulnerable to external shocks.
- ⌘ **Diseconomies in production.** Small domestic markets make it difficult for these states to reap economies of scale. They also face diseconomies because of having to produce public goods on a small scale.

Notwithstanding the challenges associated with their size, small states have been able to register, on average, higher growth rates than other countries thanks to their stronger trade links and higher investment ratios. One additional possible advantage—and an interesting theoretical trade-off in terms of public finance considerations—is that small states typically have more homogeneous populations, with similar preferences for public goods. In principle, such homogeneity could enable more efficient targeting and provision of public goods and foster greater social and economic stability.

On balance, the optimal size of a sovereign nation depends on a number of considerations, but most of the challenges faced by small states are the by-product of the relationship between economic size and macroeconomic volatility.

Size is key to volatility

Small states have relatively high GDP volatility, even after taking into account income level and degree of openness. One reason may be that smaller economies are less diversified and thus more vulnerable to external shocks. However, GDP may not be a good measure of income (or wealth) for economies that are very open to trade. For instance, the income of a commodity-exporting economy could be determined largely by the world price of its principal export commodity relative to the price of the basket of goods it imports. Indeed, the fluctuations in these "terms of trade" for developing economies tend to be sharp and persistent, reflecting, in part, the volatility of international prices for primary commodity exports.

Terms of trade volatility is 30 percent higher on average for small states than for other developing countries (Table 3). Consequently, for small states, the volatility of a measure of income growth that incorporates the effects of such terms of trade changes is even greater than that of output growth. Moreover, foreign aid flows to many small states are highly volatile and tend to be positively correlated with domestic GDP, partly because both aid flows and business cycle conditions in small states are affected by cyclical conditions in donor countries. Thus, despite the substantial benefits accruing from foreign aid, these flows may also contribute to income volatility.

Table 3
Measures of volatility

Small states are, on average, subject to greater volatility than other countries.

(standard deviations of annual growth rates, in percent; 1960-2000)

	Output	Terms of trade	Private consumption	Private and public consumption
Small states	5.8	5.6	12.6	7.7
Other developing countries	4.9	4.2	8.2	8.7
Industrial countries	2.5	1.5	2.6	2.2

Source: Kose and Prasad, 2003.

However, output (or income) volatility is less of a concern than consumption volatility, a more relevant measure of welfare. It is well known that access to financial markets, which can be used to reduce the volatility of individuals' consumption, greatly increases economic welfare. Similarly, a group of countries that do not have perfectly correlated output shocks (which they rarely do) should, in principle, be able to share their macroeconomic risk in such a way that consumption is less volatile than income in each country. If this were so, the high output volatility for small states would not be a great concern.

But are small states able to use international financial markets to reduce their aggregate consumption volatility? By one simple measure, no. In fact, in many developing economies,

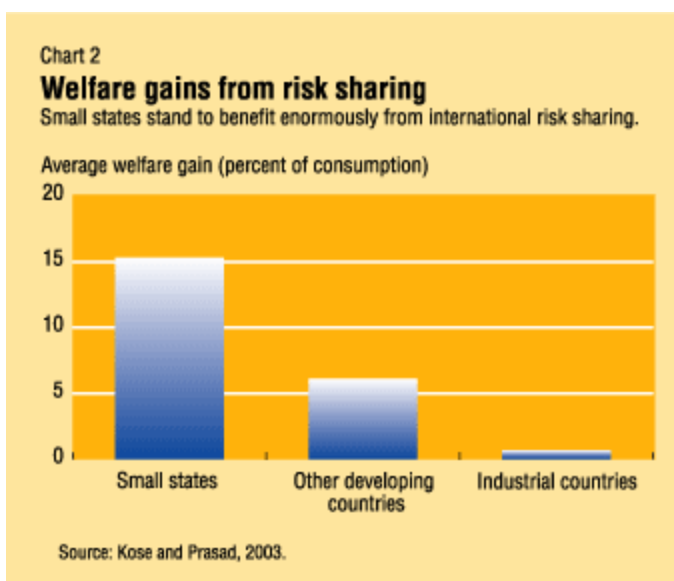
consumption is more volatile than income—on average, the standard deviation of their consumption growth is greater than that of output (or income) growth. The average ratio of the standard deviation of consumption growth to that of output growth is even higher for small states—despite their having relatively larger government sectors to help reduce the adverse impact of external shocks. The results on volatility reported in Table 3 are similar if the sample is restricted to the 1990s, the period of major financial globalization.

Policy options

The solution for these countries lies in their ability to take full advantage of increased integration with the global economy while maintaining sound macroeconomic policies and keeping their domestic markets and institutions flexible. The right policies could turn some of the macroeconomic and structural features of small states to their advantage and help them derive significant benefits from globalization.

Trade and financial links. Increasing integration with the world economy offers significant opportunities for small states. Trade links have already helped many of them increase the markets for their products and benefit from economies of scale. Openness to capital flows would offer them opportunities for diversifying into new sectors, increasing investment and growth, and achieving better risk sharing. Both trade and capital flows can also enhance the rate of technology transfer. Furthermore, globalization enables these economies to absorb and adopt best international practices in terms of governance and other institutional structures.

Developing stronger financial links remains a priority for small states. In particular, using global financial markets to reduce their consumption volatility could bring them significant welfare gains. Their best hope may thus lie in international risk sharing, through better integration with global financial markets. We estimate that, for small states, such welfare gains are potentially very large—equivalent to the effect of a permanent 15 percent increase in the level of consumption (Chart 2). These potential gains are larger for small states than for other developing countries because the former are faced with much greater consumption volatility.



Sound macroeconomic policies and structural frameworks. Of course, financial integration has its own risks. Minimizing these risks would require sound macroeconomic and structural frameworks, giving policymakers room to maneuver when shocks hit and ensuring that the shocks are not accentuated. As in other developing countries, structural reforms—better governance, lower corruption, better banking regulation, and increased competition—would boost capital inflows while reducing their volatility and mitigate the lingering effects of external shocks. Flexible fiscal frameworks would also help small states dependent on foreign aid flows to cope with flows that are highly volatile and hard to predict.

Two small states that have registered impressive average GDP growth over the past 30 years are Botswana (10 percent) and Mauritius (6 percent). These two countries are quite different, but, according to recent research, what they have in common are good governance structures and sound macroeconomic policies. In particular, Mauritius's policies for foreign direct investment and Botswana's long-term policies for improving infrastructure and education played central roles in their economic transformation.

Regional alliances. Some alliances of small states with similar economic structures (for example, the Pacific Forum and the Caribbean Community) have provided opportunities for pooling to reduce the costs of providing public goods and services. Such alliances are unlikely to help greatly in sharing risk because all members of the group would probably be subject to similar external shocks. Nevertheless, they have

other benefits; for instance, they can help small states increase their bargaining power, as a group, in trade negotiations.

New financial instruments for hedging income risk. While increasing integration with world financial markets has the potential for generating substantial benefits, recent research suggests that absence of a rich set of financial instruments and associated "macro" markets, which are necessary to fully exploit these benefits, hinders further global integration of markets. One instrument proposed by several economists, including Robert Shiller of Yale University, would be indexed to national GDPs to enable countries to share their aggregate risk measured in terms of the volatility of GDP growth. A small state could use such instruments to diversify its country-specific risk by forming a portfolio whose return depends on the economic performance of several other countries. The welfare gains associated with trading such GDP-linked financial instruments could be enormous, but the complexities of creating benchmarks for measuring risks and monitoring outcomes may have deterred private capital markets from pursuing this course. The existing vacuum suggests a possible role for the international financial institutions in creating such markets and in providing monitoring and information services that would allow these markets to operate efficiently. In this context, development of certain insurance markets—for example, catastrophe insurance to cushion the effects of natural disasters—could be critical for small states, which are highly vulnerable to transitory, exogenous shocks.

Size matters

Ultimately, however, economic size does matter. Integration with the global economy, along with sound macroeconomic and institutional structures, may help small states attain higher output growth. But, given the imperfections in international capital markets, small states may ultimately not be able to use these markets to fully insulate themselves from external shocks or significantly reduce consumption volatility in the face of income volatility. Indeed, this suggests that the political fractionalization of countries into smaller autonomous units could have serious consequences in terms of national and global macroeconomic volatility.

This article is based on the authors' IMF Working Paper with the same title, to be published in 2003.

References:

Alberto Alesina and Enrico Spolaore, 2002, "The Size of Nations" (unpublished; Cambridge, Massachusetts: Harvard University).

William Easterly and Aart Kraay, 2000, "Small States, Small Problems: Income, Growth and Volatility in Small States," World Development, Vol. 28, pp. 2013-2027.

Robert Shiller, 1998, Macro Markets: Creating Institutions for Managing Society's Largest Economic Risks (Oxford, United Kingdom: Oxford University Press).

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